

Mid october 2020 notes from phone  
I read about something simpler and more mathematically basic than set theory but I do not know what it is called, noticing most 2020 computers besides analog computers and quantum computers run off set theory ( and, or, not, nand etc), it seems possible that CPUs and programs made from deeper math than set theory could have valuable characteristics and that higher level language computer programs compiled into deeper math than set theory hardware instructions could have new advantages, one way to test this is a 2020 set theory emulation of a DM computer (DMC) and software to find out if any of it, including programs compiled into DM form are better in some ways, one possible way is that different D

M CPU layouts might be based on fewer transistors or even be made of semiconductors or other things that are actually not transistors at all, people could write simple software for the DM machine emulator then genetic algorithms (even cloud based 10,000 computer GA running a DMC (deep math computer) emulation could improve the simple programs (add, subtract, multiply, divide, other math functions, Conway's game of life, perhaps even a simple jr high level math equation solver as well as any kind of program humans think a DMC machine would be good at, disassembling the genetic algorithm optimized programs would teach human computer hardware engineers something and they could build DMCs in semiconductors (or other materials), if D

MCs work better than set theory logic at the speed or also fewer -instructions per data type (like floats that have less volume of pixel span (bytes) to do the same thing and calculate faster, then that is an advantage, DMCs and their programs also might be more fault tolerant and have different race conditions or even no race conditions at all, different predictive branching and, at the hardware level different amounts of electrons utilized (energy consumption to do a thing) along with standalone DMCs there could be a DMC section of the CPU (this might be called a core) so humans and compilers could take advantage of the things DMCs are better than what set theory computers do, also, photonic DMCs might be able to do very diffe

rent things than set theory computers, instantly

The thing I read about in wikipedia did not, as far as I remember, have any of these names but there are similarities: "depends on what you take mathematics to be, and what your standards of proof are.

Do you allow, or expect, infinitary, potentially non-constructive reasoning in mathematics? If yes to the latter, do you accept quantifier-free transfinite induction up to epsilon-zero? Do you take Peano Arithmetic as your foundation? Then your mathematics is consistent (Gentzen's theorem).

If you take strictly finitary reasoning but include mathematical

induction (and not transfinite induction), then Gödel's results leave it an open question, because there's a statement true in the standard model that you can't prove (Gödel's first theorem) and you can't use reasoning within the system to prove consistency (Second theorem), so that means either you must find a reduction strategy (say to Heyting Arithmetic, which then shifts the question there, and Gödel showed this could be done) or be comfortable with reasoning in a stronger theory, like a metatheory (which is typically seen as not favorable to the formalist or even constructivist positions).

Do you insist on Peano Arithmetic or Heyting Arithmetic as your foundation? There's a result of

Friedman and Meyer which says relevant arithmetic is consistent. But most logicians don't like relevant logics, mostly because there's so many of them, they are not characterized by finite models, and the proof theory for these systems reflects principles of carrying out mathematics that most mathematicians might not like (for instance: reductio proof is out, because one must have sharing of variables in a derivation). There's also Presburger Arithmetic, which is decidable, complete, and consistent, and has induction, but only addition axioms. Is that a suitable foundation for mathematics? There's also relative consistency proofs, and proofs of consistency using primitive recursion and finite types but, you know, these are still n

ot quite what we want, which is an absolute claim about consistency for foundations (whatever that might be).

For my money, I think the answer to the consistency of foundations question can be resolved by changing our assumptions about what the underlying logic should be – and very little has been done by way of work in substructural approaches to foundations. Given Friedman and Meyer's result, if absolute consistency is something independently valued, we should probably look elsewhere than Peano arithmetic or Is-

mathematics-self-consistent  
<https://www.quora.com/Is-mathematics-self-consistent>

Quantum dot millifiore ic lithography, imagine there could be a

quantum dot that absorbs EUV at 230 nanometers, but is like a frequency doubling or tripling crystal and reemits light around 74 nanometers, much smaller than the EUV used to make computer chips, then you naturally draw lines and circles with the quantum dots to make chip features three times smaller than EUV's 7 nanometer (your chips are better at 2.33 nanometer feature size) size, so, since the quantum dots are so tiny how do you draw lines and circles with them, one way is to attach them to a polymer ladder or trirope (or structide). Then nudge or move the entire ladder or rope into the shape you prefer because perhaps the ladder or rope is so large it responds to laser tweezers; there is a lot you can do with a rope, 0.7 nM con



ventional process features as big current carrying bars, bottom or top layer of Y connects tri-circle transistor Why would you do this, to get about 9, 36, or 144 transistors in the space of today's (October 2020) one; the quantum dots get it up to 144:1 transistors and beyond

Another possibility to make nanofine bismuth powder is spectroscopic sputtering, basically you make bismuth vapor, add lots of filler gas so it can spread out then either zoom it around in a circle with a big magnet, next to an exit port so only bismuth blobs with the right number of atoms (say 2) get ported out to something like a cheap version of a magnetic bottle

Doing millifiore use a polymer,

noting DNA which is much much thinner than a half nanometer can be pulled up out of solution with a rod, do a polymer core millifibre diameter reduction roll (sequentially) until the polymer core of the millifibre is  $1/8$  to  $1/2$  nanometers big, then the millifibre tiles, which could be as big as  $.5 \text{ cm}^2$  would contain a large plurality of circuit elements like these  $1/8$  to  $1/2$  nanometer circles at the P/N layer, these, tessellated like sphere packing are the basis of transistor tricircles

Another possibility is to blend the polymer core, pre-millifibre with quantum dots then have another pipe-like layer of bismuth powder, or, if it can possibly work a malleable bismuth foil pipe

, then millifiore it to  $1/8$  to  $1/2$  nanometer, kind of like a fat tire, the width of the bismuth layer determines non-contact width/space between tricircles

Another millifiore possibility is a semiconductor process (rinse away simultaneously with the photoresist as a soluble polymer) with 20% active ingredient-in-polymer-matrix ingredient (quantum dots, bismuth powder)

Actually using millifiore, Y or I shapes, containing quantum dots, adjacent to the central N/P circle, gives the ability to draw out an entire  $1/4$  to  $1/2$  nM polymer+active ingredient circuit, like literally, with millifiore you could draw any 2D geometry (I am reminded of a boxy circuit diagram with circular parts) and b

because each line and feature of the geometric template has a quantum dot coating around it or blended into it it can 1/4 to 1/2 nanometer so that when the quantum dots are activated to produce photomask effecting light this patterns the photomask (then semiconductors are CVD deposited, re mask, put another layer of millifiore circuit diagram down, repeat)

These millifiore tiles are circular and arrange in space like hexagonal sphere packing, it is possible to make square tiles as well, just "slab" the preroll core with 4 planes (a square) then put another polymer dough fill and tube around that, based on internet millifiore images it can stay square

One thing about the quantum dot enriched polymer that exposes the photo resist is that I think it is likely to work better if the QD+polymer blend shapes have a very thin opaque layer all around them sort of like if you put a length of rebar or an old 20th century fluorescent tube light in to the middle of an opaque long paper towel tube or gift wrap tube; bright light would only exit from the base and top; this makes it so only the photoresist directly under the tube is illuminated without leaking around making blobby forms and lowering resolution; so at a big circle or a +| or Y or \_|- there would be a very thin opaque layer at the millifore around those traces, possibly except at tile edges where you wanted light exposure to blee

d through to the adjacent tile to have light exposure that caused continuity of conductors; at a wide area millifiore tile there could be hundreds or EV a thousand or more transistor N/P single layers; as described previously, bismuth rich areas would be used to jiggle the millifiore tiles into place with each other using diamagnetism;

I do not know enough to know about duration of exposure of quantum dots or if they have to be stimulated 100,000s of times per second (UV strobe) to give a 1s exposure; the quantum dots are pretty affordable, at alibaba a quantum dot polymer film screen is about \$1-5 as just the quantum dot polymer layer, that covers an area at least as large, and poss

ibly several times as large as a 17" monitor, so the amount of quantum dots per 300mm wafer could be less than 5-25¢

I also do not know the activation frequency (UV, possibly even blue light) and optimal emissions frequency of the quantum dots; the photoresist might use alternative chemistry where it ignores UV/blue but considers itself exposed with green or IR (!)

More words: Quantum dot milliforeic lithography, imagine there could be a quantum dot that absorbs EUV at 230 nanometers, but is like a frequency doubling or tripling crystal and reemits light around 74 nanometers, much smaller than the EUV used to make computer chips, then you naturally draw lines and circles with th

use quantum dots to make chip features three times smaller than EUV's 7 nanometer (your chips are better at 2.33 nanometer feature size) size, so, since the quantum dots are so tiny how do you draw lines and circles with them, one way is to attach them to a polymer ladder or trirope (or structure). Then nudge or move the entire ladder or rope into the shape you prefer because perhaps the ladder or rope is so large it responds to laser tweezers; there is a lot you can do with a rope, 0There are lots of ways to coat biological things with metal, I am reminded of old (?) Electron microscopy where they would coat things with "noble metals" before imaging, coating things like engineering protein shapes like big beta sheet simple machines



es with bismuth makes it possible to magnetically wiggle them, powering the machine by wiggling a distal bismuth coated lever (or also Bi as part of the polymer molecule)

One possible way to coat things with bismuth is sputtering, another is a cold plasma gun, say you have a slightly complex shape, like a Y made of anything, even protein or a structide, with a standing up column at each of the Y distal tips, you would like to flip a few billion or trillion of them to Y table right side up, cold plasma bismuth application (coating) causes the 1% of them that are already table side up to get a bismuth film on their top surface; then anytime you like you can wiggle a magnet to make

them hop to Y table side up because the upper table surface is a voiding the magnet

I may have read that microencapsulated sperm are fertile and live a week with zero mortality, that made me think you could get them to live a month at 50% mortality and 3 months at 94% mortality (but 6% are still alive and fertile) things that improve this could be things that keep them from running out of food (fructose but raw ATP might work too) attaching sperm food (ATP, fructose) to a cell penetrating peptide could cause the food to reach them internally; sperm might tolerate osmotic feeding where their internal stuff content is so high they puff up a little with ATP, any other chemical in the TCA

cycle, or fructose water, then when gently passaged back to semen osmotic environment and semen, they then live an extra month or longer from getting a food infusion, another possibility is slowing their metabolism so they take more time to run out of food, slowing down mitochondrial respiration might do this; mitochondria have receptors and respond to NMN, peptides or proteins that variously open up or block those receptors to 10% of usual metabolism could turn 1 month of zero mortality into ten months of living microencapsulated

Mitochondria have porins at their outer membrane, so any moiety that gets food to transport through a mitochondrial porin could cause greater lifespan, wikipedia says antibiotics are frequentl

y transported by porins, along with simply attaching fructose, ATP (or any other TCA cycle chemical that is sperm food) to antibiotics or other chemicals that transport through the sperm mitochondrial porin is the possibility of taking the most transported antibiotic (or other chemical) and modifying it so it is absent antibiotic character which may be toxic; with an enzymatically degradable linker peptide fructose and ATP could be transported by the newly nontoxic antibiotic to feed the genetically enhanced sperm, also, methylene blue is a dye suited to living tissues such that they stay alive, methylene blue linked to fructose or also ATP (and TCA chemicals) with an enzymatically degradable amino acid linker, possibly GGG could

feed genetically enhanced sperm, also a really gentle dose of detergent could make them permeable to a puff up with food, " cells by reversible cell permeabilization using the detergent Triton X-100." So looking up something even milder than triton x-100 and using a very low dose to plump up the sperm with food over 24 hours instead of 15 minutes as triton x-100 might be used for vivo dyes could cause genetically enhanced sperm to live longer;

Wikipedia says the mitochondrial porin at sperm is anion selective; "the voltage-dependent ion channel plays a key role in regulating metabolic and energetic flux across the outer mitochondrial membrane. It is involved in the transport of ATP, ADP, pyruvate, malate, and other metabolites,"

Is there a way to give ATP or fructose an anionic (negative) charge and still have them be edible, I do not know if anions are neutralized by  $H^+$ , but between these fructose missing one hydrogen might still be edible the way 2 deoxy glucose is edible, similarly with all the (3)  $PO_3$ s at ATP making one of them have a missing hydrogen atom could leave most of the yummy ATP food Mitochondria use  $Ca^{++}$  and porins transport it, a lesser or greater amount could make sperm live longer, if lesser then at genetically enhanced human tissue culture sperm there could simply be less calcium in the tissue culture medium, if more calcium benefits sperm then more calcium could be added to the tissue culture medium Pqq PQQ might or might not be coenzy

me Q10 attached to some other thing that gets it past the exterior cytomembrane and the mitochondrial outer membrane, attach the Pqq transport moiety to fructose, ATP, and any other TCA food possible medium approach to longer life of genetically enhanced sperm, add EDTA to mop up ions of all kinds at semen to see if sperm live longer

To transport fructose/ATP/TCA foods to the mitochondria via the anion favoring mitochondrial porin: PH as anionic environment, feeding fructose or ATP at modified pH (anything above pH7 with 99% genetically enhanced sperm survival) may work better

Mitochondrial cool down tail; there are a variety of mitochondrial proteins and it is likely some

e prompt, command, sustain energy production, noting 100% survival of encapsulated sperm after one month the technology to be developed is something that causes convenience packaged long shelf life genetically enhanced sperm to use only 10% as much energy, increasing 100% survival at one month to high survival at 10 months (the same amount of metabolic energy); one approach to doing this is to find mitochondrial or sperm proteins that direct other proteins and cell processes to do metabolism and protein production and turn their activity to a decreased level so the genetically enhanced sperm can live longer, I read about how making a custom binding amino acid sequence (peptide)(or possibly protein or RNA) based on a complementary se



quence (and structure) caused what I call the tail peptide/protein to glom onto a preferred protein to change its behavior, making tail peptides to sperm and sperm mitochondrial proteins that direct metabolism and apoptosis to slow them down (and block apoptosis) is likely to be a way to get sperm to use just 10% of the usual energy, extending the lifespan of encapsulated genetically enhanced sperm from one or a few months to ten months or longer

At 60 million sperm per ejaculation there are about 300 million sperm per 10 ml; find the longest lived 9.9999 percentile and find out why they live (likely well over a month, much longer is possible) find out why compared to

o The 99th percentile that cease living, is it apoptosis, mitochondrial apoptosis, running out of food or essential amino acids or something different?

If it is apoptosis putting BCL-xL in media and commercial and consumer packaged storage could cause genetically enhanced sperm survival, wikipedia says, "or running out of food or some more Bcl-xL is present, then pores are non-permeable to pro-apoptotic molecules and the cell survives"; there are ribosomes at the mitochondria, what mtDNA are they making, what proteins, would more of less of it be of benefit? perhaps sperm run out of essential amino acids, this harms their mitochondria or them and they cease living, mitochondrial DNA, which

there is not very much of, has epigenetics, what epigenetics of mtDNA causes greatest longevity 99.9999 percentile? if their epigenetics is different than median and 99th percentile survival then try the: Even Moreso approach to amplify the beneficial epigenetics of the 9.9999 percentile while duplicating the epigenetics of the longest lived sperm at the tissue culture of genetically enhanced sperm

Moments of thought doubled or tripled maintaining median or better attention genetics

Bdnf other gf at box genes, like homeobox genes and other developmental genes that cause double thickness of neocortex are testable in rodents, monkeys; the 99th percentile of neocortex thickness

s at humans may correlate with higher g, if it does the genetic basis of 99th percentile of neocortex thickness is or are intelligence (g like IQ) genes to make part of the homo sapiens, that is peoples' that is humans' germline, additionally developmental genes like homeobox genes but likely different than homeobox genes that cause even thicker neocortex than 99th percentile could be new genes that heighten intelligence (g like IQ) could be made part of the human that is homo sapiens germline

Epigenetic modifications to fetuses during pregnant or 1 day old birthed babies that cause greater neocortex thickness are beneficial, although the entire brain is important, epigenetics that i

increases the size of the pleasure centers (the pleasureable particular shell of the nucleus accumbens, ventral pallidum, various others) and the number of dopamine receptors specifically at the pleasure centers is beneficial; it is also beneficial to increase the size of the sexual pursuit area of the hypothalamus at women without androgens at any developmental stage, pineal

Positive reinforcers for mice and rats

Mom scented cotton puffs as positive reinforcers to mice and rats could be nice to the rodents and easy to make

BT bacillus th. delta endotoxin and VIP proteins are an insecticide, perhaps optimizing its amin

o acid sequence and protein shape could make a better insecticide

Colored liposomes with higher light absorbance could be photo activation as a form of activity localization at part of a brain, like neocortex absorption of growth factors (BDNF, NGF, etc) enabled through trans-skull brain surface photoexposure of liposomes even though the liposomes are circulating at the entire body they are only active at the neocortex surface where the light shines;

peak light absorbers, or

Magnetic hard disk writers with 4 different readable modes per pixel: bump shaped magnetic field, dish, flat and corrugated (BDF

C), a modified magnetic write head could make these and I wrote some material about how electron solitons (published) come with a magnetic field I think BDFC wave forms are possible with a new kind of write head, perhaps different styles of soliton (I am aware of two, regular and dissipative), also I am sure they have thought about this already but what about the two different N or S facing up, with BDCF magnetic forms and N/S at each of them that is 8 times more data with slight variations to read write heads at a magnetic hard disk; I previously wrote at a paper notebook about a way to make a 200 terabyte 3.5" hard drive, with this that is 8 times more, 1.6 petabytes at a 3.5" hard drive, suggesting that most of the time 200 Tb of

data could be written 8 times in various locations to minimize read head seek time by having the data near wherever the read head likes to hang out at, the perimeter has the highest velocity (7200,rpm at 2020) so always storing to the perimeter first gives highest data rate; also comparing the magnetizing ability of an electron soliton running through the write head to produce something like an EM field magnetic soliton it is possible deep full depth of magnetic domain magnetization is possible as well as tapering /| magnetic form at the HDD pixel size, if these can be distinguished by a read head that is another factor of 2 bringing the HDD (3.5") to 3.2 petabytes

Mini optical proteolytic cup pee



or plucked hair test with 7 colors times two line types (dashed or solid) and 3 cup depths (bottom, mid, top), also the cups could come in pairs or triples like a : or tricup with a common wide fluid sharing channel at the base and super hydrophobic wicking to the other cups to make 3 48 on/off variables per cup, a mini jelly cup (10-15 gram) is \$5 for 600 on alibaba (cup to diagnose and a delicious cup you eat which makes something that collects chemicals for more better diagnostic ability, perhaps creamy pudding as the protein makes it non transparent; gene test) so less than a cent a cup for jello that does its own proteolytic and wicking chemistry with see-through sides; 144 different chemicals tested for

Another possibility is a delicious drink in a sealed cup alibaba 1 cent as a jelly treat, you drink the evening before and a cup you pee into in the morning, the cup you drink has enteric coated liposomal antibodies to 146 different chemicals, these glom chemicals/proteins in the bloodstream and then you pee them out in the morning, perhaps the antibody has a CPP that localizes to kidneys, this concentrates chemicals of interest for when you pee in the indicator cup, it is my perception antibody based stains to antibodies concentrates (too weak to test antibodies, layered twice become strong enough to see) antibodies and increases detectability and contrast, the drink and cup two pack could come connected and you just detach the dri

nk and go

Personality and other psychology test written around questions that have .9 correlation with some chemical, its kind of crude but estrogen goes with women, usually so 2/3 likely to be F, feelers, yet screening like 100 variations on feeler questions might find some that are .9 correlated with estrogen presence, and meaningfully how much, similar with testosterone and mbti thinker type (2/3rds of males are thinker type), this could be combined with cortisol to diagnose likeliness of stressed or unstressed F-feelings, it is possible endogenous phenyl ethyl amines or dopamine post chemicals (dopamine oxide?) Telling how happy (PEA) and motivating (dopamine oxide) your

life is, at .9 as corroborated with the concepts/wording of the product developmental test; other chemicals could be anything associated with longevity although I don't think the sensitivity is enough for telomeres, creatinine to diagnose heart trouble early, and, as a hair follicle/root is damp with what I think might be plasma when it comes out, anything beneficially diagnostic that is in plasma such as globulin ratios, iron to diagnose anemia, very easily treated to give people more energy, also some measure of fertility, like month long circulation globulin-bound sex hormones, at 2 cent at alibaba dollar store pregnancy tests detect really minute amounts of human chorionic gonadotropin really minute amounts of things bound to p

plasma (dampness at hair root, proteolytic product of hair root digest) that show 1-3 month body averages possibly with sugar-reacted globin bound products at plasma correlating to blood sugar, just as dopamine has a circulating post neurotransmitter form I read about (similar to the words dopamine oxide) 5HT (serotonin) may also have a "5HT oxide", the amount of and balance of many (20? 40?) Different neurotransmitter oxides (more AMPA means you are smart(er), more oxytocin more feeling and affiliative, schizophrenia test results before you have symptoms

Pee test plant band aid, farmers could put a cellulosease containing dot band aid on plants and color responsive antibodies could

tell the farmer a plurality of useful things, likely 1-2 cents at alibaba and less than 6 cents per dot

Mosquito terminator that might reduce malaria; there are audio mosquito repellents, are there audio mosquito attractors, if there are you could put them at the lid of a pitcher of soapy water that takes a couple of months to evaporate, the mosquito's fly in, land on the sponge and cannot fly out; another possibility is simply a roll of flypaper (mosquito paper) with a battery powered photovoltaic all night intermittent acoustic effect

The internet says male mosquito's are attracted to female mosquito sounds, but I do not know what sounds, if any female mosquito

s are attracted to

Could an immunization to mosquito toxin which is perhaps a dermis dissolving protease or also an anticoagulant make mosquito bites less itchy and annoying? One dose might (might not) last a lifetime and relieve children and adults from discomfort

There may be a genetic reason why some people get fewer mosquito and other bug bites, using protocols (approximately described) at my paper notes, these genes, if non deleterious and supporting pale white attractive (porcelain) skin are beneficial to place at homo sapiens' that is humans' that is people's germline genome

The internet says mosquito's do not respond to light, but the in

ternet also mentions what I perceive is a scientific study that they are 500% more active (I do not know what active means here) at the full moon so the unique spectrum of moonlight could make them more active, a dollar store photovoltaic lawn ornament over a built in water container and a moon spectrum LED could possibly attract them, or, if active means they fly away from things with moonlight on them aiming moonlight LEDs at doors and bedspread in a sleep compatible way could cause them to be active about staying out of rooms and also avoiding people in bed, people with socializing backyards could put up moonlight LED floodlights which might even work during the day or at dusk



Moonlight LED augmented drone, optimally silent to very quiet, perhaps with egg whisk rotors replacing propellers (paper notes), drags electrified mesh over mosquito's it spots using IR night vision, as most B&W webcams have/had. The cheapest rechargeable plausible drone on alibaba is \$3.00 with WiFi, which is beneficial as a PC can read the drone's video and tell it where to go, also a racket bug zapper on alibaba is 15 cents, the camera might be 10 cents so the mosquito zapping WiFi drone might be \$3.25 plus land-on wireless recharger(60 cents at alibaba), this could also be a new IoT (internet of things) appliance with more than a billion units globally if it works well, I think \$3.25 + 60 cents, \$3.85 is affordable at the de

veloping world where a mosquito bednet is about \$2-4, but is 23 cents to 95 cents (insecticide treated) at alibaba

I have never heard of polymer wave bednet, window and door(?) Mosquito netting that approaches transparency from the polymer fibers, which are actually tubes being gradient refractive index sideways along-length lenses (GRIN lenses)

Could there be such a thing as a fun mosquito bednet, lingerie look may be appealing to some, as could doll/video character themes for children; putting a fun 3 month (2 layers nested) helium mylar balloon inside the net might be fun, I have not seen one with extra fabric that drapes over a nightstand with for example a

glass of water, a book, a tablet computer, a sexual pleasure vibrator, a netting accessible night stand drawer, and a clock or phone on it

Noise cancellation directed confocal piezo speakers could remove mosquito noises by aiming at people's ears while being far from their head, this would work on other buzzing insects as well, this is somewhat comparable to two groups of five wired piezo buzzers for 2 cents each plus the computational sophistication of an alibaba 1 cent microcontroller so, from some perspectives this is 11 cents, from other perspectives that include wires and wall plugs and ac/DC converters it is 54 cents, as a guess, from alibaba parts, it may not work very w

ell without a camera to see and track ear location (another 10 cents)

Beaded curtains at interior doors may keep mosquito's from passing doors particularly if the beaded curtain has an acoustic mosquito repeller aimed at the beads which are structured to resonate to a second emitted nonaudible frequency that causes the specially shaped beads to each emit bug repelling frequencies on its own. Powering these things around the bedroom at the developing world makes me think of \$3 drones carrying (alibaba) 10 cent rechargeable power banks, a library of 10 power banks could fly around the developing or developed world at about \$4.11 (camera and microcontroller also) for the grouperid

Conductive polymer like rubber, even conductive carbon or better conductive rubber is corrosionless, waterproof and wipes clean at 100 wireless charger and drop/casually an inexactlly placed power bank to power the wireless charger that then charges a phone, tablet, or even a drone, plaid power traces support simply putting power bank brick on top of each other

Things on alibaba are noticeably cheaper than Fred Meyer, Amazon, or EBay, part of this I think is removing all the break-bulk and middlemen from the distribution, and products sometimes come direct from the factory, but if things continued to be displayed for planned and impulse pickup at showrooms called "stores" during 20

20 then a way to remove middlemen and stock showrooms is of value, a new form of shrink wrap product that is drone friendly could make this functional: 1) print all six sides of a box or other object with invisible barcodes, these barcodes are only visible to ir cameras like those on the stocking drones, likely a QR (2D) code this would contain UPC code and more information 2) the plastic the pallet was wrapped in a: polymer, form, and wrap style that a drone's laser could cut through (perhaps transparent ir absorbing plastic, a compact disk players laser diode can pop a balloon so a cutting grid projecting laser is likely near 10 cents on alibaba and the camera and computer can verify there are no people around and like a backup v

vehicle it can beep for 5 seconds to keep people away from it before lighting the all pallet side cutting grid 3) with the pallet wrap out of the way the flying drones grab the stuff and take it to the shelves or other CAD encoded 3D location (put the new empty flowerpot on the glass table next to the outdoor lounge furniture) 4) enumerate the stuff on the pallet and update showroom and manufacturer's database; during 2020 there was already research on automated stocking

Longevity technology a wellness technology that might be a longevity technology made of network theory math: from looking at effect "cascades" some of which are signalling cascades, the graphical diagram maps people make that

have things that look like interconnected circles make me think of networks, and that makes me think of math and computer analogies like swap space reducing hanging time, solving or precluding race conditions; they could find these on purpose looking at mRNA outliers, math, computer science, and control theory; like, find the 95th percentile most cushioned networks and the 95th percentile least cushioned networks at 18 year olds and compare them to the same networks at 80 year olds, did the least cushy networks get cushier or did they do something like break or start leaving some of their line and circle diagram neighbors out? If the least cushy networks are more frequently broken at 80 year olds, and potentially important stuff is n



ot happening, and the really cushiony networks may have shifted but are mostly fine that suggests finding the 1-5% least cushioned/cushy networks and doing gene therapy to make them more cushioned/cushy could cause less deleterious stuff over time

A really simplified and unclueful way of looking at this is find the weakest links and make them stronger, a much better way is to replace each circle at a diagram with an array, then make sure all the circles have the array capacity to support, be supported, send and receive; find the circle arrays at greatest numerical (math) risk of going nonlinear or failing then adjust the circle neighbors so they omit prompting those failure conditions, where

possible heighten the capacity of the at risk circle array with drugs(chemicals), epigenetics or gene therapy (gene duplicates, different alleles, better promoters); the whole organism goal is to modify the 1-5% most likely to break to be at the body median (or less) of likely to break, crispr can change 20,000 genes simultaneously in a mouse so crispr-ing the most at risk circles (1-5%) in the diagrams to create simultaneous improvement on many fronts, then after cushioning up the least OK nodes together find out if the organism (mouse, then human) is healthier and perhaps longer lived than (thinking cushions) the crispr UNreupholstered version; if that works I think it is possible to make a smaller high lifespan/healthspan group of

f version optimized network nodes to base human drugs and gene therapies on; interestingly these therapies do not (generally) treat a specific disease they just prevent a lot of disease; i think this network analysis and direct intervention can be applied before knowing what the network parts do, from things like mRNA outliers

There may or may not be a correlation between nonpregnant cervix diameter and maximum cervical diameter while giving birth and an easier more dilated higher diameter birth cervix might go with a faster more pleasant birth experience for mother and baby, if so then the genetics of both predictive nonpregnant cervix and actual fully dilated in-birth cervix

could be linkable to genetics and if the genetics of optimal (likely 99.9th percentile) cervical size in-birth are non deleterious then making them part of the germline of all homo sapiens that is people that is humans is beneficial. The same thing for shortest duration of labor, but with all the systems and hormones involved they would have to be even more careful to be assured a germ line genetic change is nondeleterious.

Aspirin is described as repelling mosquito's online; new aspirins, propylene aspirin, sulfoaspirin, doubtful enteric CPP aspirin (dermis concentrating)(might reduce skin cancer and itch), halogenated salicylate,

Insecticide on bednets a color,

when color fades time to re-treat bednets

63 cent alibaba adult bednet, divide into 4 pieces for four child bednets at 16 cents each

attractants can be used to cause mosquitos to fly into traps, I do not know the formulas anti-citronella, doubtful but halogenated ethynylized existing mosquito attractants could make them 1000 times more potent which has similarities to 1000 times cheaper, blood flavoring, gel electrophoresis of sweat, blood, then 1 mm gel slices a cm apart to find what they like, 10% landing rate but delicious on the feet nonvolatile attractant that lasts longer Mosquito attractant and insecticide in one, applied with alibaba 1 cent wet wipe to a .25 meter

r<sup>2</sup> area of a bednet attracts them and wipes them out with human CO<sub>2</sub> and moisture as baseline co-attractants to get the mosquito's to visit the insecticide wet-wiped area; perhaps double or quadruple strength insecticide at the wet wipe amplifies termination compared with multiple landings on an entire bednet, human endogenous somatic CYP enzyme susceptible insecticide (ases like deaminase, hydroxylase, many others) rapidly decomposes insecticide if a human absorbs it

Antimalarial tail peptide, my perception is that the mosquito parasite (malaria) falciparum something is a eukaryote thus has lots of receptors, tail peptides can turn receptors from hypersensitive to off, a blend of say 11-

40 tail peptides could terminate falciparum or keep it from reproducing and be administered at the dwelling from a 40 dose nasal spray container, Cell penetrating peptides that work on falciparum could make the effective dose many times more potent, maybe, causing it to be many times cheaper

Nasal spray improvement technology, something that might be called wonderberry makes a variety of foods taste sweeter, it is possible that people that vomit through their nose actually also taste it there, snorting wonderberry chemicals might actually make snot have a detectable pleasant flavor rewarding people that are compliant with their nasal spray drugs (like peptides, GDF-11, kl

otho protein etc) also fast acting opiate peptides at really minute quantities (picograms have an effect on rodents) could obviate swimmers nose effect from nasal spray, nasal tailored liposomal formula could make the opiate peptides absorb better and possibly faster as could cell penetrating peptides, when the nasal spray drains to the back of the throat it goes to the stomach breaking up the peptides, non mu receptor (get high opiate receptor) opiate peptides may exist that also have local anesthetic effects, combining these two (wonderberry and opiate peptide) could make a nearer sensation less nasal spray with a sweetness reward

Push up magnetic domains, HDD, hyper dielectric (plasmonic) diel



ectrics could be used at RAM capacitors and transistors, maybe, peltier effect RAM cooling, faster clock speed with longer life, peltier on top layer of wafer, peltier top GPU chips (likely already considered seems like peltier CPUs must have been thought of) diamond CVD vertical vias and diamond top of wafer could assist this, heat conductive ceramic or polymer at IC bodies could be 60% tungsten metal particles as they do not melt when the polymer/ceramic is formed, goes well with peltier RAM/GPU/CPU,

CPP paleness bremelanotide could have higher dose potency and 33-480 times (published) more rapid action on the brain, if (when) they find receptors associated with the male and female sexual re

refractory period then tail peptides and proteins and RNA can be made to park those receptors into continuous ready-to-go pre-orgasm mode removing the sexual refractory period, as a drug this could be an all day delivery at one month of transdermal patch function, if this is without deleterious effects the receptor tail modifying peptides/proteins/RNAs are beneficial to make a part of the homo sapiens, that is humans that is people's germline genome

Live in-computer over clocking of RAM, RAM has a speed, it is possible at on motherboard RAM or stick (card) RAM adjusting the RAM speed (at a mechanism automatic to the computer but with OS addressability) upward and doing

a diagnostic (like 4 billion cycles of write/read verify) could find the optimal higher speed for the RAM, at any of motherboard level, memory card level or even individual IC level possibly making it 25-100% (noting peltier RAM) faster, high utility at server farms (internet), CAD, games, video editing, memory intensive applications could go 25-100% faster; another possibility is faster optical fiber internet, i imagine there is a thing kind of like an optical demultiplexer chip (serial to parallel), over clocking it could permit a (2020) 100 GbS chip to receive data at 125-200 GbS if the part is on-computer overclocked and verified

Better quantum dots, quantum dot

s above the second standard deviation might be unusually spectrally pure in output and stimulate ability, it is possible spraying (perhaps electrostatically) quantum dots in a magnetic field takes advantage of their diamagnetism to sort them on mass and "alloy" ratio predictability producing a source of better than average quantum dots, noting quantum dots are much bigger than atomic isotopes perhaps alternatives to magnetic separation could be based on isotope separation; gas centrifuge like non halogenated quantum dots might simply be centrifugally separable with a membrane, also i read about aqueous membrane separation of isotopes, perhaps quantum dots at a nonpolar or weakly polar (DMSO in liquid hexane) solution, perhaps with

charge from being energized with UV, could diffuse through a membrane, repeatedly (kind of like reflux) to concentrate the ones of near identical mass and near identical e- charge from UV, high volume uses for spectrally purer quantum dots include phone, computer, and video displays, other volumes would support medicine and research

4-8 bit matrix logic, better and, nand, or not clusters, better predictive branching 1 or 4 GHz 4 or 8 level (possibly actual vertical layer stacks on wafer) could big words 16 bits of 4/8 matrices benefit servers and databases and CAD and games and velocitize queries; MBU, math batching unit, also FPGA (FPGmatrixA) version

CeO nanoparticles, are quantum dot sized ones better

The rubber finger grips of pens feel different when they are velvet textured than smooth, perhaps velvet textured condoms could be measured to see if they are more pleasurable to women

new endogenously produced PDE5 inhibiting (viagra-like) peptides turn off during pregnancy, cause erections, clitoral engorgement,

beautiful face that causes others to be nice to you at repose; internet survey, may have previous writing, an improvement

Non genital erogenous zones, technology that causes them to be larger and more sensitive

without increasing skin  
sensitivity to nonoptimal levels.  
the brain "body part diagram",  
dubious but hox genes, very  
dubious about the hox genes,  
99th percentile of nongenital  
erogenous zone sensitivity

I have written about technology  
to beneficially cause all males  
to have erect penises 8 inches  
or longer with 6 inch girth from  
engineering the homo sapiens,  
that is human, that is people  
globally's germline. Noting  
that, today during October  
2020AD I perceive some males  
would like to make their erect  
penises longer or thicker it is  
possible a modified condom with  
a gel form tip form that is more  
pleasurable to percuss and rub  
at than an actual vagina that

penis is in contact with is possible; the technology is: Think of an extra long condom with a 2 inch long blob of vinyl gel at the end, this causes deeper effective penetration for interested men and women and optional increase in girth at the blob area that would be felt as the head of the penis; (I) shaped center firmness beam, because the condom provides Also, if it goes lopsided during sex that, to my perception is unproblematic; The transition from condom lumen (hollow space) through gel stages could start out very liquidy and pushable into by the penis when putting the length extending concom on, the gel grading from push-aside mousse gel gradually to soft gel, with firm gel then very



firm PVC at the 2 inches of tip, to make the gel form condom more pleasurable than bare contact with an actual vagina the gel form tip and mousselike first gel layer heat up (it is my perception that a particularly warm or hot vagina is even more pleasurable to have sex with, so having the gelform length extension condom heat up to the most pleasurable temperature could possibly make it feel better than a bare penis at a normal temperature vagina;

chinese finger trap on thrusting, glans rim can nest with annular groove at extension gel shape, condom style , 1-2 cents each at alibaba (condom is 1 cent/each), actual 1 hour chemistry of generating warmth

to make the extension gel shape even more pleasureable than a regular vagina at the extension gel shape, one source of the chemistry for that: During about 1992AD I experienced sex with a woman who used a contraceptive vaginal insert that foamed and generated a lot of warmth, even heat

During about 1992AD I experienced a contraceptive vaginal insert that foamed generated a lot of warmth, even heat it is possible that the birth control effectiveness of vaginal inserts goes up with antibodies to sperm surface proteins attached to sperm terminators like vagina-mild detergent (nonoxynol-9 is a

2020AD condom sperm terminator or even Zinc ion, CPP highly localized to sperm might be a functional thing, if it does CPP-([link](#))-apoptosis peptide or protein might work if harmless to the vagina, sperm tail adhered proteins or peptides, or polymers, or even, just possibly sperm tail length sticky strings, could also be vaginal insert contraceptives, or also condom interior/exterior ingredients

Making genetically enhanced sperm better, wikipedia identifies a middle piece where the tail is surrounded by

mitochondria, double or half that could variously make them able to swim faster or use less food to stay fertile longer during storage like encapsulation or better (nuvaring)

tail dip jig is only osmotic area to puff up with food

Other sperm foods at the medium or storage medium could be acetyl-CoA, "CoA is acetylated to acetyl-CoA by the breakdown of carbohydrates through glycolysis and by the breakdown of fatty acids through  $\beta$ -oxidation. Acetyl-CoA then enters the citric acid cycle, where the acetyl group is oxidized to carbon dioxide and water, and the energy released is captured in the form of 11

ATP and one GTP per acetyl group.”

There is just a possibility that because the sperm mitochondria have TCA cycle and can process lipids, that a lipid enriched sperm has lots of food energy ( 8 cal per gram compared with 4), “At low glucose levels, the production of acetyl-CoA is linked to  $\beta$ -oxidation of fatty acids”

Taking human tissue homogenate, put it in supportive medium and see which human tissues have the longest living mitochondria, those mitochondrial types could be instantiated at sperm to generate longer sperm life and greater motility; also compare cytosol and organelle function at longest lived tissues and noting some human tissues revive after lyophilization  
<https://www.freepatentsonline.com/y2>

018/0104282.html the human tissue cytes that revive after lyophilization are a guide to the organelles, their particular size, chemistry that permit successful revival from hydration from lyophilization

The patent describes successful tissue (skin) lyophilization media with >70% revival that they could test this media on sperm, this may work now: Lyoprotectant

Solution

Composition

Cell Viability

Comments

10% DMSO, 12.5%  
<50% viable cells

Not selected

HSA in D-PBS

25% HSA in D-PBS

No viable cells

Not selected

0.25M Trehalose,

Majority of cells are

Not selected

12.5% HSA in D-  
viable

PBS

0.1M Trehalose in

No viable cells

Not selected

D-PBS

0.25M Trehalose in  
Majority of cells are  
Inconsistent results  
D-PBS  
viable  
0.5M Trehalose in  
Majority of cells are  
Selected: highest cell  
D-PBS  
viable  
viability by qualitative  
assessment with simplest  
composition

1M Trehalose in D-  
Majority of cells are  
Similar results to 0.5M  
PBS  
viable  
trehalose.  
0.25M Trehalose,  
Majority of cells are  
Not selected, causes brown  
1 mg/mL Catechin in  
viable  
coloration of amnion  
D-PBS

“samples from this experiment were tested for cell viability, and VLAM should have >70% viable cells for the rinse to deem acceptable.”

A technology that could raise the viability of lyophilized genetically enhanced sperm is coculturing, or just **mixing, then 24 hours of**

**stabilization, dermatocytes with sperm cytes** such that the proportions keep the sperm from ever overlapping, the cell-to-cell contact surface may be particularly benign, and along with regular dermatocytes if seminal vesicle membrane tissues lyophilize and revive well then that could be tissue cultured to be used as the mix-with-sperm possible lyophilization preservative

Lyophilizing freeze dries sperm, but what of partial lyophilization, frozen thawed sperm is fertile, so at a range of 100 samples, each at 1%, 2%, 3%... 100% dewatered from partial freeze drying spread out as a monolayer powder on a porous bottom (polymer) sheet, which of the 1-100 percentage steps survive, after freezing revive? And, what is the foil package under nitrogen survival or



microencapsulation survival of each stepwise 1%? At microencapsulation 100% of fresh sperm survive 1 month (published) There is an aqueous osmotically neutral way to have a 50% water, 50% some other thing that has very gradual osmotic change (maybe its just stirring and titration) such that the cyte omits shriveling or bursting, The some other thing might be fructose or a sperm edible electrically neutral amino acid; What is the fresh sperm, lowest percentage of cyte body water that can support a moving vital the moving vital sperm number, Then find out which least water % prep environment permits the revival of those no-longer-swimming -sperm? Those numbers suggest a possible number for a fractional lyophilization, high revival after storage at consumer packaging genetically enhanced sperm product ; If fresh sperm still

swim at 70% less body water, that means something, if sperm that have ceased swimming on their own at 80% body water can be revived to swim starting at 50-100% body water that is something

It is pretty likely 99% hydrated is fine, so what about if 50% hydrated stays functional for many months, is a humid gel microbead powder, that can go in a cervical ring (nuvaring) or break n shake vaginal applicator

Freeze drying the already dehydrated, but still vital sperm could also work better as the interval of freezing is less: (If fresh sperm still swim at 70% less internal body water, that means something, if sperm that have ceased swimming on their own at 80% internal body water can be revived to swim starting at 50-100% internal

body water that is something)  
according to something like that you  
could lyophilize the 70% osmotically  
dehydrated sperm with just 30% of  
the shock-to-sperm interval

Thaw osmotic internal organelle  
“shock”; when it rehydrates with  
water, but the 1st 10% of rehydration  
comes with a very high organelle ion  
difference so it does anything from  
physically popping them or shriveling  
them, to wiping out their chemistry.  
pH could change an order of  
magnitude (1 pH number) just from  
having the first minute of rehydration  
dissolve the cytoplasm's ions; As a  
lyophilization survival strategy preload  
sperm with ion balancers like more  
K(potassium) without inorganic ion so  
like Kaminoacid, or even K-ATP, if it  
the other way then more chloride,  
(Aminoacid-cl?) (MgCl<sub>2</sub>?) calcium

chloride?; Perhaps if cyte is naturally acidic, bicarbonate ion like  $\text{KCO}_3$  or even amino acid  $\text{CO}_3$  or  $\text{MgOH}$  would balance and buffer pH throughout entire 1-100% of hydration change

Also, a 1-100% (100) rehydration steps-maintained buffer and ratio maintainer is new to me, as a "stepwise no-shock buffer;

Other buffer chemicals for osmotic shock, or also misaligned anion and cation ratios from stepwise hydration: if cyte is naturally basic, buffer the 1-100% cytoplasm hydration steps (10-100x ion concentration during the first 2 seconds after pouring or shaking with water/plasma replacer) Treat basicity with citric acid (TCA cycle), Malic Acid (TCA cycle), Acetic acid (also a food for some cytes); Perhaps if cyte is naturally acidic, bicarbonate

ion like  $\text{KCO}_3$  or even amino acid  $\text{CO}_3$  or  $\text{MgOH}$  would balance and buffer pH throughout entire 1-100% of hydration change

If sperm as part of their functionality produced their own buffer (acid+salt, others) chemicals, then they might revive better after lyophilization

So, at a break n shake lightstick-like lyophilized sperm

reconstituter/rehydrator the velocity at which the water reaches the interior of the sperm cytes might determine the amount of mess-up to the cyte so rehydrating fully as rapidly as possible might cause greater reconstituted genetically enhanced sperm vitality, one way to do that could be nonharmful sonic vibration. The Break n Shake genetically enhanced sperm stick vaginal insert could have a button battery and a specially tuned

piezoelectric buzzer for 2 cents (alibaba; piezo buzzer with wires 1 cent, battery .6 cent), the tuned sonication would make the regularization of cyte pH, ion concentrations, and other things return to those of fresh sperm much more rapidly than just the break n shake n wait 3 minutes approach. Being able to use the sperm in less than three minutes is beneficial for convenience, and adding a color change LED (from blue to green) (green means go) to the break n shake stick that already has a battery and piezo element is likely less than 1 cent

buzzer(pH and ion gradients 100 times larger than usual concentrations, totally different chemical ratios during redissolving of cytoplasm and plumping up organelles

phase)

piezoelectric get water in the  
organelles rapidly from vibration  
button cell (alibaba .6 cents)